



SEQUENCE LISTING

<110> Prayaga, Sudhirdas K
Vernet, Corine
Shimkets, Richard A
Burgess, Catherine E
Spytek, Kimberly A

<120> Novel Polynucleotides and Polypeptides Encoded Thereby

<130> 15966-72, 76, 76A, 80, 112

<140> 09/672,665
<141> 2000-09-28

<150> 60/156,745
<151> 1999-09-30

<150> 60/158,942
<151> 1999-10-06

<150> 60/159,248
<151> 1999-10-13

<150> 60/169,344
<151> 1999-12-06

<150> 60/215,048
<151> 2000-06-29

<160> 32

<170> PatentIn Ver. 2.0

<210> 1
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1
atgtcagatg cagctgtaga caccagctct gaaatcattt ccaaggactt aaaggagaag 60
aaggaagtgg tgaaagaggc ggaaaatggg agagacgccc ctgctaacgg gaatgcta 120
gagaaaaatgg gggagcaggg ggctgacaag gagttatgg aagaaggggg agaaagtggg 180
gaggaagagg aggaggaaaa agaagggtat ggtgagggaa aggtggaga tgaagaggaa 240
gctgagtctg ctacaggcaa gcgggcagct gaagatgtat aggtgtatga tgtcgatacc 300
aagaagcaga agaccgacaa ggtatgac 327

<210> 2

<211> ·109
<212> PRT
<213> Homo sapiens

```

<400> 2
Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Ile Ala Lys Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Lys Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala Asn Gly Asn Ala Asn Glu Glu Asn Gly Glu Gln Glu Ala
35 40 45

Asp Lys Glu Val Asp Glu Glu Gly Glu Glu Ser Gly Glu Glu Glu Glu
50 55 60

Glu Glu Lys Glu Gly Asp Gly Glu Glu Glu Asp Gly Asp Glu Glu Glu
65 70 75 80

Ala Glu Ser Ala Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp Asp
85 90 95

Asp Val Asp Thr Lys Lys Gln Lys Thr Asp Lys Asp Asp
100 105

```

<210> 3
<211> 555
<212> DNA
<213> Homo sapiens

<400> 3
atgtcagacg cagccgtaga caccagctcc gaaatcacca ccgaggactt aaaggagaag 60
aaggaagtgc tggaagagggc ggaaaatgga agagacgccc ctgctcacgg gaatgcta 120
gaggaaaatg gggagccgga ggctgacaac gaggttagatg aagaagagga agaagggtggg 180
gaggaagaag gtgatggta ggaagaggat ggagatgaag atgaggggac tgagtca 240
acgggcaagc gggcagctga agatgatgag gataacgatg tcgataccca gaagcagaag 300
accgacgagg atgaccagac ggcaaaaaag gaaaagttaa actaaaaaaaaa aaggccgccc 360
tgacctattc accctccact tcccgctca gaatctaaac gtggtcacct tcgagttaga 420
gggccccccc gcccaccgtg ggcagtgcca cccgcagatg acacgcgctc tccaccaccc 480
aacccaaacc atgagaattt gcaacagggg agggaaaaag aacccaaaact tccaaggccc 540
tgctttttttttttt 555

<210> 4
<211> 114
<212> PRT
<213> *Homo sapiens*

<400> 4

Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Glu Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala His Gly Asn Ala Asn Glu Glu Asn Gly Glu Pro Glu Ala
35 40 45

Asp Asn Glu Val Asp Glu Glu Glu Glu Gly Gly Glu Glu Glu Gly
50 55 60

Asp Gly Glu Glu Glu Asp Gly Asp Glu Asp Glu Gly Ala Glu Ser Ala
65 70 75 80

Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp Asn Asp Val Asp Thr
85 90 95

Gln Lys Gln Lys Thr Asp Glu Asp Asp Gln Thr Ala Lys Lys Glu Lys
100 105 110

Leu Asn

<210> 5

<211> 675

<212> DNA

<213> Homo sapiens

<400> 5

tgaactctcg ctttctttt aatccccctgc atcggatcac cggcgtgcc caccatgtca 60
gacgcagccg tagacaccag ctccgaaatc accaacaagg acttaaagga gaagaaggaa 120
gttgtgaaag aggcagaaaa tggaaagagac gcccctgcta acggaaatgc taatgaggaa 180
aatggggagc aggaggctga caatgaggtt gacgaagaag aggaagaagg tggggaggaa 240
gaaggtgatg gtgaggaaga ggatggagat gaagatgagg aagctgagtc agctacgggc 300
aagcgggcag ctgaagatga tgaggataac gatgtcgata ccaagaagca gaagaccgac 360
gaggatgacc agacggcaaa aaaggaaaag tttaaactaaa aaaaaaaaaaag gccggccgtga 420
cctattcacc ctccacttcc cgtctcagaa tctaaacgtg gtcaccttc agtagagagg 480
cccgcccccc caccgtggc agtgcaccc gcagatgaca cgcgctctcc accacccaac 540
ccaaaccatg agaatttgca acaggggagg aaaaaagaac caaaacttcc aaggcctgct 600
tttttctta aaagtacttt aaaaaggaaa tttgttgc ttttttattt ccattttata 660
tttttgtaca tattt 675

<210> 6

<211> 114

<212> PRT

<213> Homo sapiens

<400> 6

Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Asn Lys Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala Asn Gly Asn Ala Asn Glu Glu Asn Gly Glu Gln Glu Ala
35 40 45

Asp Asn Glu Val Asp Glu Glu Glu Glu Gly Gly Glu Glu Glu Gly
50 55 60

Asp Gly Glu Glu Glu Asp Gly Asp Glu Asp Glu Glu Ala Glu Ser Ala
65 70 75 80

Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp Asn Asp Val Asp Thr
85 90 95

Lys Lys Gln Lys Thr Asp Glu Asp Asp Gln Thr Ala Lys Lys Glu Lys
100 105 110

Leu Asn

<210> 7

<211> 345

<212> DNA

<213> Homo sapiens

<400> 7

atgtcagacg cagccgtaga caccagctcc gaaatcacca ccgaggactt aaaggagaag 60
aaggaagtgc tggaagaggc gaaaaatgga agagacgccc ctgctcacgg gaatgcta 120
gaggaaaatg gggagccgga ggctgacaac gagtagatg aagaagagga agaagggtggg 180
gaggaagaag gtgtatggta ggaagaggat ggagatgaag atgagggagc tgagtca 240
acgggcaagc gggcagctga agatgatgag gatgacgatg tcgataccca gaagcagaag 300
accgacgagg atgaccagac agcaaaaaag gaaaagttaa actaa 345

<210> 8

<211> 114

<212> PRT

<213> Homo sapiens

<400> 8

Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Glu Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala His Gly Asn Ala Asn Glu Glu Asn Gly Glu Pro Glu Ala
35 40 45

Asp Asn Glu Val Asp Glu Glu Glu Glu Gly Gly Glu Glu Glu Gly
50 55 60

Asp Gly Glu Glu Glu Asp Gly Asp Glu Asp Glu Gly Ala Glu Ser Ala
65 70 75 80

Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp Asp Asp Val Asp Thr
85 90 95

Gln Lys Gln Lys Thr Asp Glu Asp Asp Gln Thr Ala Lys Lys Glu Lys
100 105 110

Leu Asn

<210> 9
<211> 501
<212> DNA
<213> Homo sapiens

<400> 9
attgttcctt gtccggctcc ttgctcgccg cagccgcctt taccgctgcg gactccggac 60
acttcatcac cacagtccct gaactctcgc tttctttta atccccctgca tcggatcact 120
ggtgtgccgg accatgtcag acgcagccgt agacaccagc tccgaaatca ccaccaagga 180
cttaaagaag aaggaaagctg tggaggaagc ggaaaatgga agagacaccc ctgctaattgg 240
gaaggctaat gaggaaaatg gggagcagga agctgacaat gaagttagatg aagaagagga 300
agaagggtggg gaggaagacg aggaggaaga agaaggcgat ggtgaggaag aggatggtga 360
tgaagacgag gaagctgagt ccgctacggt caagcgggca gctgaagatg atgagaatga 420
tgatgcctat accaagaagc agaagaccaa caaggatgac tagacagcaa aaaaggaaat 480
gttaggaggg tgacctattc a 501

<210> 10
<211> 109
<212> PRT
<213> Homo sapiens

<400> 10
Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys Asp

1

5

10

15

Leu Lys Lys Lys Glu Ala Val Glu Glu Ala Glu Asn Gly Arg Asp Thr
20 25 30

Pro Ala Asn Gly Lys Ala Asn Glu Glu Asn Gly Glu Gln Glu Ala Asp
35 40 45

Asn Glu Val Asp Glu Glu Glu Gly Gly Glu Glu Asp Glu Glu
50 55 60

Glu Glu Glu Gly Asp Gly Glu Glu Asp Gly Asp Glu Asp Glu Glu
65 70 75 80

Ala Glu Ser Ala Thr Val Lys Arg Ala Ala Glu Asp Asp Glu Asn Asp
85 90 95

Asp Ala Tyr Thr Lys Lys Gln Lys Thr Asn Lys Asp Asp
100 105

<210> 11

<211> 342

<212> DNA

<213> Homo sapiens

<400> 11

atgtcagacg cagccgtaga caccagctcc gaaatcacca ccgaggactt aaaggagaag 60
aaggaagtgtg tggaagaggc ggaaaatgga agagacgccc ctgctcacgg gaatgcta 120
gaggaaaatg gggagccgga ggctgacaac gagtagatg aagaagagga agaaggtggg 180
gaggaagaag gtgtatggta ggaagaggat ggagatgaag atgagggagc tgagtca 240
acgggcagaac gggcagctga agatgatgag gataacgatg tcgataccca gaagcaga 300
accgacgagg atgaccagac ggcaaaaaaag gaaaagttaa ac 342

<210> 12

<211> 114

<212> PRT

<213> Homo sapiens

<400> 12

Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Glu Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala His Gly Asn Ala Asn Glu Glu Asn Gly Glu Pro Glu Ala
35 40 45

Asp Asn Glu Val Asp Glu Glu Glu Glu Gly Gly Glu Glu Glu Gly
50 55 60

Asp Gly Glu Glu Glu Asp Gly Asp Glu Gly Ala Glu Ser Ala
65 70 75 80

Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp Asn Asp Val Asp Thr
85 90 95

Gln Lys Gln Lys Thr Asp Glu Asp Asp Gln Thr Ala Lys Lys Glu Lys
100 105 110

Leu Asn

<210> 13

<211> 324

<212> DNA

<213> Homo sapiens

<400> 13
atgagctcg ccagccgggt tttgcgcctt caggcccccg gttgggtgtt cctggggttg 60
gtgctccctt ccctcccctc gcctctctt accctctcca ttcccccctc agctgaagct 120
gaagaagatg gggacctgca gtgcctgtgt gtgaagacca cctcccaaggt ccgtcccagg 180
cacatcacca gcctggaggt gatcaaggcc ggaccccaact gccccactgc ccaactgatg 240
gccacgctga agaatgaaag gaaaatttgc ttggacctgc aagccccgt gtacaagaaa 300
aggattaaga aactttgaa gagt 324

<210> 14

<211> 108

<212> PRT

<213> Homo sapiens

<400> 14

Met Ser Ser Ala Ser Arg Val Leu Arg Leu Gln Ala Pro Gly Leu Val
1 5 10 15

Phe Leu Gly Leu Val Leu Leu Ser Leu Pro Ser Ser Ser Leu Thr Leu
20 25 30

Ser Ile Ser Pro Ser Ala Glu Ala Glu Glu Asp Gly Asp Leu Gln Cys
35 40 45

Leu Cys Val Lys Thr Thr Ser Gln Val Arg Pro Arg His Ile Thr Ser
50 55 60

Leu Glu Val Ile Lys Ala Gly Pro His Cys Pro Thr Ala Gln Leu Met
65 70 75 80

Ala Thr Leu Lys Asn Gly Arg Lys Ile Cys Leu Asp Leu Gln Ala Pro
85 90 95

Leu Tyr Lys Lys Arg Ile Lys Lys Leu Leu Lys Ser
100 105

<210> 15

<211> 738

<212> DNA

<213> Homo sapiens

<400> 15

gtgcatagcg taatgtccat gttgttctac actctgatca cagctttct gatcggcata 60
caggcggAAC cacactcaga gagcaatgtc cctgcaggac acaccatccc ccaagcccac 120
tggactaaac ttccagcattc ccttgacact gcccggcga gagccccggcag cgccccggca 180
gcggcgatag ctgcacgcgt ggccgggcaag acccgcaaca ttactgtgaa ccccgaggctg 240
tttaaaaagc ggcgactccg ttcacccgt gtgctgttta gcaccccagcc tccccgtgaa 300
gctgcagaca ctcaggatct ggacttcgag gtcgggtgggctt caacaggact 360
cacaggagca agcggtcatc atccccatccc atcttccaca gggcgaatt ctgggtgtgt 420
gacagtgtca gcgtgtgggt tggggataaag accaccgcca cagacatcaa gggcaaggag 480
gtgatggtgt tgggagaggt gaacattaac aacagtgtat tcaaacadgtt ctttttgag 540
accaagtgcc gggacccaaa tcccgttgac agcgggtgcc ggggcattga ctcaaagcac 600
tggaaactcat attgtaccac gactcacacc tttgtcaagg cgctgaccat ggtggcaag 660
caggctgcct ggcggtttat ccggatagat acggcctgtg tgtgtgtgct cagcaggaag 720
gctgtgagaa gaggctga 738

<210> 16

<211> 241

<212> PRT

<213> Homo sapiens

<400> 16

Met Ser Met Leu Phe Tyr Thr Leu Ile Thr Ala Phe Leu Ile Gly Ile
1 5 10 15

Gln Ala Glu Pro His Ser Glu Ser Asn Val Pro Ala Gly His Thr Ile
20 25 30

Pro Gln Ala His Trp Thr Lys Leu Gln His Ser Leu Asp Thr Ala Leu
35 40 45

Arg Arg Ala Arg Ser Ala Pro Ala Ala Ala Ile Ala Ala Arg Val Ala
50 55 60

Gly Gin Thr Arg Asn Ile Thr Val Asp Pro Arg Leu Phe Lys Lys Arg
65 70 75 80

Arg Leu Arg Ser Pro Arg Val Leu Phe Ser Thr Gln Pro Pro Arg Glu
85 90 95

Ala Ala Asp Thr Gln Asp Leu Asp Phe Glu Val Gly Gly Ala Ala Pro
100 105 110

Phe Asn Arg Thr His Arg Ser Lys Arg Ser Ser Ser His Pro Ile Phe
115 120 125

His Arg Gly Glu Phe Ser Val Cys Asp Ser Val Ser Val Trp Val Gly
130 135 140

Asp Lys Thr Thr Ala Thr Asp Ile Lys Gly Lys Glu Val Met Val Leu
145 150 155 160

Gly Glu Val Asn Ile Asn Asn Ser Val Phe Lys Gln Tyr Phe Phe Glu
165 170 175

Thr Lys Cys Arg Asp Pro Asn Pro Val Asp Ser Gly Cys Arg Gly Ile
180 185 190

Asp Ser Lys His Trp Asn Ser Tyr Cys Thr Thr His Thr Phe Val
195 200 205

Lys Ala Leu Thr Met Asp Gly Lys Gln Ala Ala Trp Arg Phe Ile Arg
210 215 220

Ile Asp Thr Ala Cys Val Cys Val Leu Ser Arg Lys Ala Val Arg Arg
225 230 235 240

Ala

<210> 17
<211> 345
<212> DNA
<213> Homo sapiens

<400> 17
tgccggacca tgtcagacgc agccgttagac accagctccg aaatcaccac caaggactta 60
aaggagaaga aggaagttgt ggaagaggca gaaaatggaa gagacgcccc tgctaacggg 120
aatgctaatg agaaaaatgg ggagcaggag gctgacaatg aggttagacga agaagaggaa 180
gaagggtgggg aggaagagga ggaggaagaa gaaggtgatg gtgaggaaga ggatggagat 240
gaagatgagg aagctgagtc agtacgggc aagcggcag ctgaagatga tgaggatgac 300

gatgtcgata ccaagaagca gaagaccaac aaggatgact agaca

345

<210> 18

<211> 110

<212> PRT

<213> Homo sapiens

<400> 18

Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala Asn Gly Asn Ala Asn Glu Glu Asn Gly Glu Gln Glu Ala
35 40 45

Asp Asn Glu Val Asp Glu Glu Glu Glu Gly Gly Glu Glu Glu Glu
50 55 60

Glu Glu Glu Gly Asp Gly Glu Glu Asp Gly Asp Glu Asp Glu
65 70 75 80

Glu Ala Glu Ser Ala Thr Gly Lys Arg Ala Ala Glu Asp Asp Glu Asp
85 90 95

Asp Asp Val Asp Thr Lys Lys Gln Lys Thr Asn Lys Asp Asp
100 105 110

<210> 19

<211> 350

<212> DNA

<213> Homo sapiens

<400> 19

tgcggacca tgcacgcg accacccatcg aaatcaccac caaggactta 60
aaggagaaga aggaagttgt ggaagaggca gaaaatggaa gagacgcccc tgctaacggg 120
aatgctaattt agaaaaatgg ggagcaggag gctgacaatg aggttagacca agaagaggaa 180
gaagggtgggg aggaagagga ggaggaagaa gaagggtatg gtgaggaaga ggatggagat 240
gaagatgagg aagctgagtc acctacggc aaccggcag ctgaagatga tgaggatgac 300
gatgtcaata ccaaggaagg cggaaggacc aaccaaggga tgactagaca 350

<210> 20

<211> 113

<212> PRT

<213> Homo sapiens

<400> 20
Met Ser Asp Ala Ala Val His Thr Thr Ser Glu Ile Thr Thr Lys Asp
1 5 10 15

Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Asn Gly Arg Asp
20 25 30

Ala Pro Ala Asn Gly Asn Ala Asn Glu Glu Asn Gly Glu Gln Glu Ala
35 40 45

Asp Asn Glu Val Asp Gln Glu Glu Glu Gly Gly Glu Glu Glu
50 55 60

Glu Glu Glu Gly Asp Gly Glu Glu Asp Gly Asp Glu Asp Glu
65 70 75 80

Glu Ala Glu Ser Pro Thr Gly Asn Arg Ala Ala Glu Asp Asp Glu Asp
85 90 95

Asp Asp Val Asn Thr Lys Glu Gly Gly Arg Thr Asn Gln Gly Met Thr
100 105 110

Arg

<210> 21
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 21 20
atgtcagacg cagccgtaga

<210> 22
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 22

accagatccg aaatcaccac cgag

24

<210> 23

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 23

cttccacaac ttccttcttc tcct

24

<210> 24

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 24

agaggaagct gagtctgcta cagg

24

<210> 25

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 25

cctcatcatc ttcaagtgcc cgctt

25

<210> 26

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 26

tctgcttctt ggtatcgaca tcat

24

<210> 27

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 27

agatgtcaga cgccggcgt

20

<210> 28

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 28

cagctccgaa atcaccacccg aggac

25

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 29

tccacaactt cttttttctc cttt

24

<210> 30

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 30

tgcctataacc aagaagcaga ag

22

<210> 31

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 31

ccaacaagga tgactagaca gcaaaa

26

<210> 32

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
Synthesized

<400> 32

tgaataggtc accctcctaa ca

22